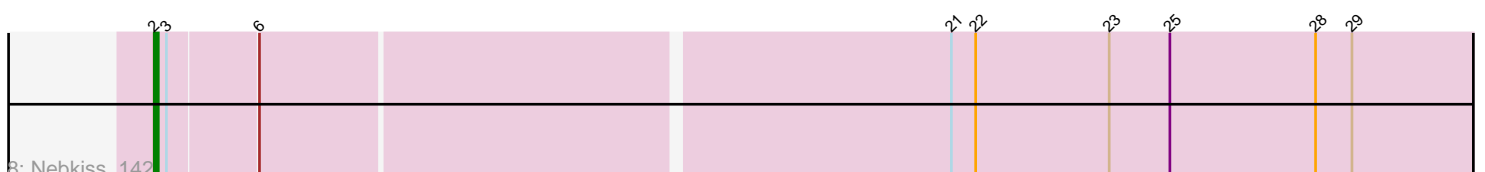
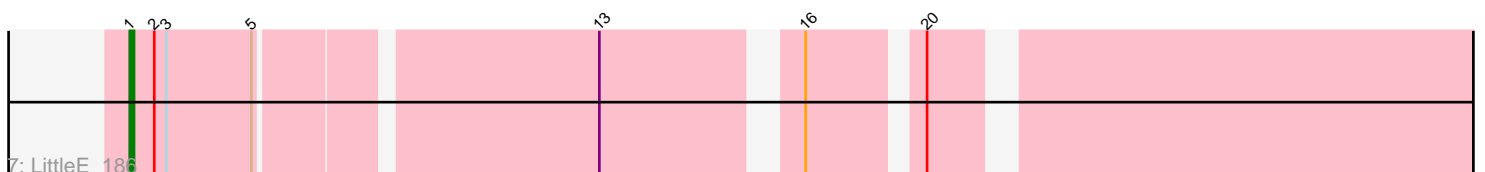
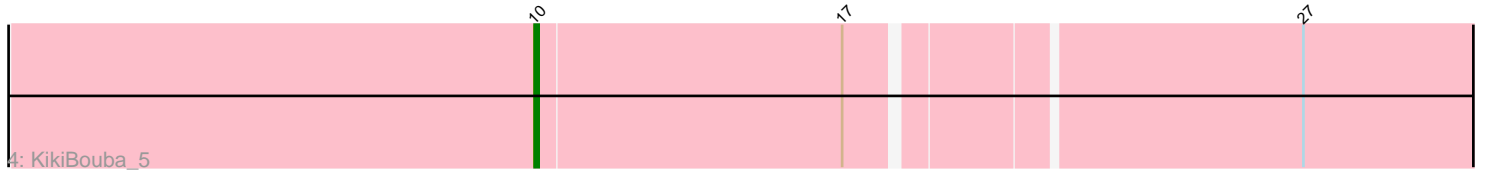
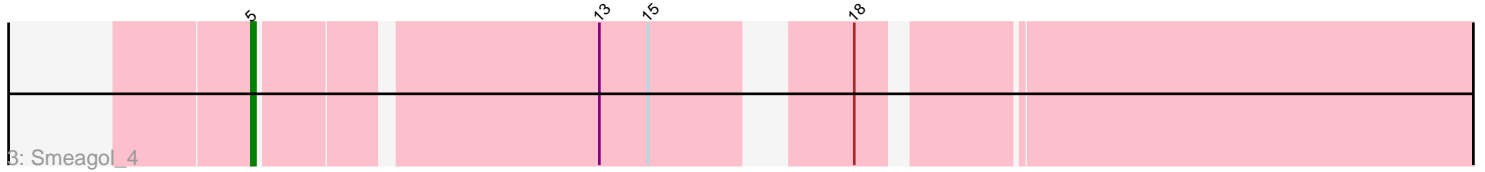
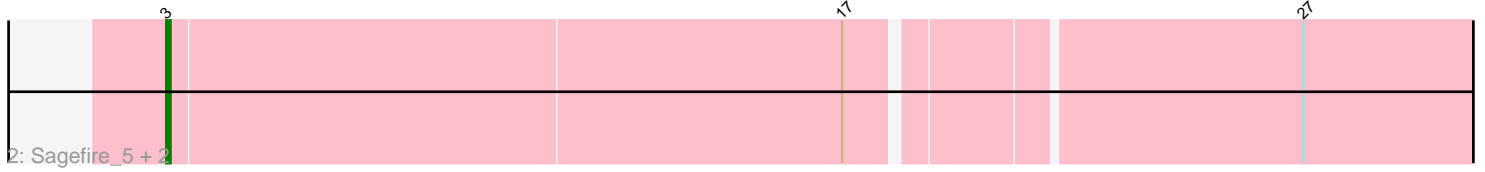
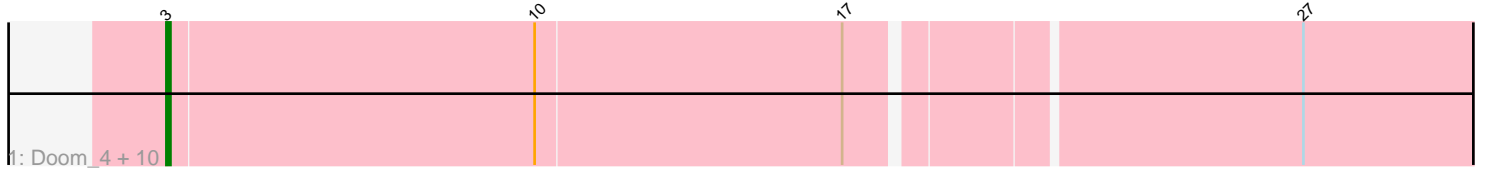


Pham 311929



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

## Pham 311929 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311929 has 27 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Doom\_4, ILeeKay\_5, Ajay\_4, Adahisdi\_4, DirtDevil\_4, KBG\_4, Smairt\_4, Aldrich\_4, BigPaolini\_5, GroundGoblin\_4, Oogway\_3
- Track 2 : Sagefire\_5, Rutherford\_4, Peterson\_5
- Track 3 : Smeagol\_4
- Track 4 : KikiBouba\_5
- Track 5 : Phendrix\_128
- Track 6 : Lucky2013\_179, Ariel\_184, Porcelain\_183, MiaZeal\_186, Gonephishing\_177, Courthouse\_180, Superphikiman\_181
- Track 7 : LittleE\_186
- Track 8 : Nebkiss\_142
- Track 9 : Gaia\_147

### ***Summary of Final Annotations (See graph section above for start numbers):***

The start number called the most often in the published annotations is 3, it was called in 12 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adahisdi\_4, Ajay\_4, Aldrich\_4, BigPaolini\_5, DirtDevil\_4, Doom\_4, GroundGoblin\_4, ILeeKay\_5, KBG\_4, Oogway\_3, Peterson\_5, Rutherford\_4, Sagefire\_5, Smairt\_4,

Genes that have the "Most Annotated" start but do not call it:

- Ariel\_184, Courthouse\_180, Gonephishing\_177, LittleE\_186, Lucky2013\_179, MiaZeal\_186, Nebkiss\_142, Porcelain\_183, Superphikiman\_181,

Genes that do not have the "Most Annotated" start:

- Gaia\_147, KikiBouba\_5, Phendrix\_128, Smeagol\_4,

### **Summary by start number:**

Start 1:

- Found in 8 of 27 ( 29.6% ) of genes in pham
- Manual Annotations of this start: 7 of 24
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Ariel\_184 (J), Courthouse\_180 (J), Gonephishing\_177 (J), LittleE\_186 (J), Lucky2013\_179 (J), MiaZeal\_186 (J), Porcelain\_183 (J), Superphikiman\_181 (J),

#### Start 2:

- Found in 9 of 27 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Nebkiss\_142 (X),

#### Start 3:

- Found in 23 of 27 ( 85.2% ) of genes in pham
- Manual Annotations of this start: 12 of 24
- Called 60.9% of time when present
- Phage (with cluster) where this start called: Adahisdi\_4 (A1), Ajay\_4 (A1), Aldrich\_4 (A1), BigPaolini\_5 (A1), DirtDevil\_4 (A1), Doom\_4 (A1), GroundGoblin\_4 (A1), ILeeKay\_5 (A1), KBG\_4 (A1), Oogway\_3 (A1), Peterson\_5 (A1), Rutherford\_4 (A1), Sagefire\_5 (A1), Smairt\_4 (A1),

#### Start 4:

- Found in 1 of 27 ( 3.7% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gaia\_147 (X),

#### Start 5:

- Found in 9 of 27 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Smeagol\_4 (A1),

#### Start 9:

- Found in 2 of 27 ( 7.4% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Phendrix\_128 (DK),

#### Start 10:

- Found in 12 of 27 ( 44.4% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 8.3% of time when present
- Phage (with cluster) where this start called: KikiBouba\_5 (A1),

### Summary by clusters:

There are 4 clusters represented in this pham: A1, X, J, DK,

Info for manual annotations of cluster A1:

- Start number 3 was manually annotated 12 times for cluster A1.
- Start number 5 was manually annotated 1 time for cluster A1.
- Start number 10 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster DK:

- Start number 9 was manually annotated 1 time for cluster DK.

Info for manual annotations of cluster J:

- Start number 1 was manually annotated 7 times for cluster J.

Info for manual annotations of cluster X:

- Start number 2 was manually annotated 1 time for cluster X.
- Start number 4 was manually annotated 1 time for cluster X.

### **Gene Information:**

Gene: Adahisdi\_4 Start: 1698, Stop: 2012, Start Num: 3

Candidate Starts for Adahisdi\_4:

(Start: 3 @1698 has 12 MA's), (Start: 10 @1788 has 1 MA's), (17, 1863), (27, 1968),

Gene: Ajay\_4 Start: 1694, Stop: 2008, Start Num: 3

Candidate Starts for Ajay\_4:

(Start: 3 @1694 has 12 MA's), (Start: 10 @1784 has 1 MA's), (17, 1859), (27, 1964),

Gene: Aldrich\_4 Start: 1705, Stop: 2019, Start Num: 3

Candidate Starts for Aldrich\_4:

(Start: 3 @1705 has 12 MA's), (Start: 10 @1795 has 1 MA's), (17, 1870), (27, 1975),

Gene: Ariel\_184 Start: 90388, Stop: 90705, Start Num: 1

Candidate Starts for Ariel\_184:

(Start: 1 @90388 has 7 MA's), (Start: 2 @90394 has 1 MA's), (Start: 3 @90397 has 12 MA's), (Start: 5 @90418 has 1 MA's), (13, 90496), (14, 90502), (19, 90562), (24, 90619),

Gene: BigPaolini\_5 Start: 2209, Stop: 2523, Start Num: 3

Candidate Starts for BigPaolini\_5:

(Start: 3 @2209 has 12 MA's), (Start: 10 @2299 has 1 MA's), (17, 2374), (27, 2479),

Gene: Courthouse\_180 Start: 90832, Stop: 91149, Start Num: 1

Candidate Starts for Courthouse\_180:

(Start: 1 @90832 has 7 MA's), (Start: 2 @90838 has 1 MA's), (Start: 3 @90841 has 12 MA's), (Start: 5 @90862 has 1 MA's), (13, 90940), (14, 90946), (19, 91006), (24, 91063),

Gene: DirtDevil\_4 Start: 1705, Stop: 2019, Start Num: 3

Candidate Starts for DirtDevil\_4:

(Start: 3 @1705 has 12 MA's), (Start: 10 @1795 has 1 MA's), (17, 1870), (27, 1975),

Gene: Doom\_4 Start: 1700, Stop: 2014, Start Num: 3

Candidate Starts for Doom\_4:

(Start: 3 @1700 has 12 MA's), (Start: 10 @1790 has 1 MA's), (17, 1865), (27, 1970),

Gene: Gaia\_147 Start: 77990, Stop: 78283, Start Num: 4

Candidate Starts for Gaia\_147:

(Start: 4 @77990 has 1 MA's), (7, 78023), (8, 78053), (Start: 9 @78056 has 1 MA's), (11, 78074), (12, 78077), (16, 78137), (18, 78149), (21, 78167), (28, 78242),

Gene: Gonephishing\_177 Start: 91649, Stop: 91966, Start Num: 1

Candidate Starts for Gonephishing\_177:

(Start: 1 @91649 has 7 MA's), (Start: 2 @91655 has 1 MA's), (Start: 3 @91658 has 12 MA's), (Start: 5 @91679 has 1 MA's), (13, 91757), (14, 91763), (19, 91823), (24, 91880),

Gene: GroundGoblin\_4 Start: 1705, Stop: 2019, Start Num: 3

Candidate Starts for GroundGoblin\_4:

(Start: 3 @1705 has 12 MA's), (Start: 10 @1795 has 1 MA's), (17, 1870), (27, 1975),

Gene: ILeeKay\_5 Start: 1874, Stop: 2188, Start Num: 3

Candidate Starts for ILeeKay\_5:

(Start: 3 @1874 has 12 MA's), (Start: 10 @1964 has 1 MA's), (17, 2039), (27, 2144),

Gene: KBG\_4 Start: 1933, Stop: 2247, Start Num: 3

Candidate Starts for KBG\_4:

(Start: 3 @1933 has 12 MA's), (Start: 10 @2023 has 1 MA's), (17, 2098), (27, 2203),

Gene: KikiBouba\_5 Start: 1796, Stop: 2020, Start Num: 10

Candidate Starts for KikiBouba\_5:

(Start: 10 @1796 has 1 MA's), (17, 1871), (27, 1976),

Gene: LittleE\_186 Start: 93578, Stop: 93880, Start Num: 1

Candidate Starts for LittleE\_186:

(Start: 1 @93578 has 7 MA's), (Start: 2 @93584 has 1 MA's), (Start: 3 @93587 has 12 MA's), (Start: 5 @93608 has 1 MA's), (13, 93686), (16, 93728), (20, 93752),

Gene: Lucky2013\_179 Start: 89904, Stop: 90221, Start Num: 1

Candidate Starts for Lucky2013\_179:

(Start: 1 @89904 has 7 MA's), (Start: 2 @89910 has 1 MA's), (Start: 3 @89913 has 12 MA's), (Start: 5 @89934 has 1 MA's), (13, 90012), (14, 90018), (19, 90078), (24, 90135),

Gene: MiaZeal\_186 Start: 91050, Stop: 91367, Start Num: 1

Candidate Starts for MiaZeal\_186:

(Start: 1 @91050 has 7 MA's), (Start: 2 @91056 has 1 MA's), (Start: 3 @91059 has 12 MA's), (Start: 5 @91080 has 1 MA's), (13, 91158), (14, 91164), (19, 91224), (24, 91281),

Gene: Nebkiss\_142 Start: 72674, Stop: 72994, Start Num: 2

Candidate Starts for Nebkiss\_142:

(Start: 2 @72674 has 1 MA's), (Start: 3 @72677 has 12 MA's), (6, 72698), (21, 72863), (22, 72869), (23, 72902), (25, 72917), (28, 72953), (29, 72962),

Gene: Oogway\_3 Start: 1553, Stop: 1867, Start Num: 3

Candidate Starts for Oogway\_3:

(Start: 3 @1553 has 12 MA's), (Start: 10 @1643 has 1 MA's), (17, 1718), (27, 1823),

Gene: Peterson\_5 Start: 2390, Stop: 2704, Start Num: 3

Candidate Starts for Peterson\_5:

(Start: 3 @2390 has 12 MA's), (17, 2555), (27, 2660),

Gene: Phendrix\_128 Start: 77796, Stop: 77560, Start Num: 9

Candidate Starts for Phendrix\_128:

(8, 77799), (Start: 9 @77796 has 1 MA's), (25, 77637), (26, 77613), (28, 77601),

Gene: Porcelain\_183 Start: 90850, Stop: 91167, Start Num: 1

Candidate Starts for Porcelain\_183:

(Start: 1 @90850 has 7 MA's), (Start: 2 @90856 has 1 MA's), (Start: 3 @90859 has 12 MA's), (Start: 5 @90880 has 1 MA's), (13, 90958), (14, 90964), (19, 91024), (24, 91081),

Gene: Rutherferd\_4 Start: 1660, Stop: 1974, Start Num: 3

Candidate Starts for Rutherferd\_4:

(Start: 3 @1660 has 12 MA's), (17, 1825), (27, 1930),

Gene: Sagefire\_5 Start: 1861, Stop: 2175, Start Num: 3

Candidate Starts for Sagefire\_5:

(Start: 3 @1861 has 12 MA's), (17, 2026), (27, 2131),

Gene: Smairt\_4 Start: 2007, Stop: 2321, Start Num: 3

Candidate Starts for Smairt\_4:

(Start: 3 @2007 has 12 MA's), (Start: 10 @2097 has 1 MA's), (17, 2172), (27, 2277),

Gene: Smeagol\_4 Start: 2209, Stop: 2484, Start Num: 5

Candidate Starts for Smeagol\_4:

(Start: 5 @2209 has 1 MA's), (13, 2287), (15, 2299), (18, 2338),

Gene: Superphikiman\_181 Start: 90528, Stop: 90845, Start Num: 1

Candidate Starts for Superphikiman\_181:

(Start: 1 @90528 has 7 MA's), (Start: 2 @90534 has 1 MA's), (Start: 3 @90537 has 12 MA's), (Start: 5 @90558 has 1 MA's), (13, 90636), (14, 90642), (19, 90702), (24, 90759),